

Serial No. 10/849,056

KY-202

Amendment

Responsive to Final Office Action dated August 15, 2008

**Amendments to the Claims:**

This listing of claims will replace all prior versions and listings of claims in the application:

## Listing of Claims:

1.-3. (Canceled)

4. (Currently Amended) A mute circuit in a BTL circuit formed in an IC which drives a speaker by a first output stage amplifier and a second output stage amplifier which generates an inverted output signal with respect to an output signal of the first output stage amplifier, comprising:

a mute signal generation circuit for generating ~~thea~~ mute signal and ~~a two~~ first switch circuits turned ON or OFF by the mute signal for a predetermined interval;

wherein the second output stage amplifier receives the output signal of the first output stage amplifier as an input and generates the inverted output signal, the output signal of the first output stage amplifier is output to a terminal of the speaker, and the output signal of the second output stage amplifier is output to another terminal of the speaker and wherein, and ~~through the mute signal the switch circuit is turned OFF for a predetermined interval to effect muting and~~

~~wherein~~ each of the first and second output stage amplifiers is an operational amplifier of which an output stage is constituted by a push-pull structured transistors, one of the two switch circuits is provided between a gate of one the push-pull structured transistors and a power source line, and another of the two switch circuits is provided between a gate of another of the push-pull structured transistors and ground, the two switch circuits are

Serial No. 10/849,056

KY-202

Amendment

Responsive to Final Office Action dated August 15, 2008

~~provided for the first switch circuit is constituted through turning OFF the push-pull structured~~ ~~respective~~ transistors of one of the first output stage amplifier and the second output stage amplifier for ~~at~~ the predetermined interval by the mute signal to effect muting and an output of the one of the first output stage amplifier and the second output stage amplifier is set at a high impedance.

5. (Original) A mute circuit according to claim 4, wherein the second output stage amplifier receives the output signal of the first output stage amplifier via a resistor, the switch circuit is an analog switch, ~~and the mute signal is a pulse signal having a predetermined width which is generated when a power source is turned ON or OFF~~ and the analog switch is turned ON during a period of the predetermined width.

6.-8. (Canceled)

9. (Currently Amended) A BTL audio amplifier apparatus formed in an IC which drives a speaker by a first output stage amplifier and a second output stage amplifier which generates an inverted output signal with respect to an output signal of the first output stage amplifier, comprising:

Serial No. 10/849,056

KY-202

Amendment

Responsive to Final Office Action dated August 15, 2008

a mute signal generation circuit for generating ~~the~~ a mute signal and ~~a first two first~~ switch circuits turned ON or OFF by the mute signal for a predetermined interval;

wherein the second output stage amplifier receives the output signal of the first output stage amplifier as an input and generates the inverted output signal, the output signal of the first output stage amplifier is output to a terminal of the speaker, and the output signal of the second output stage amplifier is output to another terminal of the speaker; and wherein ~~through the mute signal the first switch circuit is turned OFF for a predetermined interval to effect muting and~~ wherein each of the first and second output stage amplifiers is an operational amplifier of which an output stage is constituted by a push-pull structured transistors, one of the two first switch circuits is provided between a gate of one of the push-pull structured transistors and a power source line, and another of the two first switch circuits is provided between a gate of another of the push-pull structured transistors and ground, the two first switch circuits are provided for the first switch circuit is constituted through turning OFF the push-pull structured ~~respective~~ transistors of one of the first output stage amplifier and the second output stage amplifier for ~~a the~~ a predetermined interval by the mute signal to effect muting and an output of the one of the first output stage amplifier and the second output stage amplifier is set at a high impedance.

10. (Currently Amended) A BTL audio amplifier apparatus according to claim 9, wherein the second output stage amplifier receives the output signal of the first output stage amplifier via a resistor, the first switch circuit is an analog switch, ~~and~~ the mute signal is a pulse signal

Serial No. 10/849,056

KY-202

Amendment

Responsive to Final Office Action dated August 15, 2008

having a predetermined width which is generated when a power source is turned ON or OFF  
and the analog switch is turned ON during a period of the predetermined.

11. (Original) A BTL audio amplifier apparatus according to claim 10, further comprising a plurality of second switch circuits provided in any one of the first and second output stage amplifier, wherein the respective first and second output stage amplifier are provided with a plurality of drive circuits for driving the respective transistors, and through interrupting operation currents of the plurality of drive circuits upon receiving the mute signal by the plurality of the second switch circuits and through turning OFF the transistors, any one of the outputs of the first and second output stage amplifier is set at a high impedance.

12. (Original) A BTL audio amplifier apparatus according to claim 11, wherein the drive circuit is a differential amplifier circuit, the plurality of second switch circuits interrupt the operation currents of the plurality of the differential amplifiers in the second output stage amplifier and turns OFF the transistors.